ERRATA

Advanced Mathematics 1

for AS and A Level

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The following erratum was made on 19/Oct/2017

page 576 **CHAPTER 23 EXAMPLE 8**, table heading in solution should read:

a The test statistic is the number of ones that appear in 6 rolls of the die, X.

$\therefore$ $X \sim B(6,\ 0.25)$

x	p-value
0	1
1	≈ 0.822
2	≈ 0.466
3	≈ 0.169
4	≈ 0.0376
5	$\approx 0.004\,64$
6	$\approx 2.44 \times 10^{-4}$

The following erratum was made on 25/Jul/2017

page 185 **REVIEW SET 7A**, should read:

13 The temperature of a mug of water t minutes after it has been poured from a kettle is given by $T = 60e^{-0.1t} + 20\ °\text{C}$.
Show that it will take $10 \ln 3$ minutes for the temperature of the water to fall to $40°\text{C}$.

The following erratum was made on 13/Jun/2017

page 295 **CHAPTER 12 EXAMPLE 6** solution, diagram should not have axis labels to avoid confusion:

Example 6   ◀) Self Tutor

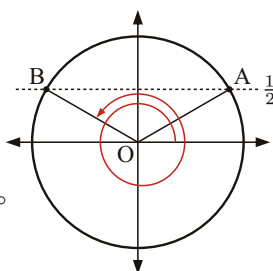Solve $2 \sin 3x = 1$ on the interval $0° \leqslant x \leqslant 180°$.

$2 \sin 3x = 1$

$\therefore\ \sin 3x = \frac{1}{2}$

Since $0° \leqslant x \leqslant 180°$
$\ \ 0° \leqslant 3x \leqslant 540°$

$\therefore\ 3x = 30°,\ 150°,\ 390°,\ \text{or}\ 510°$
$\therefore\ \ x = 10°,\ 50°,\ 130°,\ \text{or}\ 170°$

Start at angle $0°$ and work around to $540°$, noting down the angle every time you reach points A and B.